STATE ENERGY PROGRAM FY 2000 SPECIAL PROJECTS ANNOUNCEMENT
EFFECTIVE DATE: November 22, 1999

SUBJECT: PROGRAM YEAR 2000 STATE ENERGY PROGRAM SPECIAL PROJECTS FINANCIAL ASSISTANCE GUIDANCE

PURPOSE: To provide guidance and management information for the State Energy Program Special Projects for program year 2000.

SCOPE: The provisions of this guidance apply to all States, Territories, and the District of Columbia (hereinafter "States"), applying for 2000 Special Projects financial assistance under the Department of Energy's (DOE) State Energy Program (SEP). Much of the information in this guidance is summarized from the rules applicable to SEP, 10 CFR part 420 and 10 CFR part 600.

BACKGROUND: In 2000, for the fifth year, DOE is offering States the opportunity to apply to undertake a variety of Special Projects under SEP. DOE has reviewed its end-use sector energy efficiency and renewable energy programs in which State assistance is an implementation strategy. As a result of this review, DOE is inviting States to submit proposals to implement specific DOE Office of Energy Efficiency and Renewable Energy (EERE) deployment activities and initiatives as Special Projects under SEP. States will compete for funding to implement activities relating to a number of programmatic areas such as Federal energy management, building codes and standards, alternative fuels, industrial efficiency, building efficiency, and renewable energy technologies. Approximately $14 million will be available for these projects.

LEGISLATION: SEP is authorized under PL 94-385, PL 94-619, PL 94-580, PL 101-440, and PL 102-486. The end-use sector programs participating in the SEP Special Projects are covered by their respective statutes. All financial assistance provided under SEP shall comply with applicable legislation.

REGULATIONS: SEP is governed by its program regulations (10 CFR part 420) published in the Federal Register on July 8, 1996, and amended in the Federal Register dated May 14, 1997, and August 24, 1999, and the DOE Financial Assistance Rules (10 CFR part 600).

1.0 STATE ENERGY PROGRAM SPECIAL PROJECTS ACTIVITIES

1.1 SPECIAL PROJECTS GENERAL PROVISIONS: The Office of Energy Efficiency and Renewable Energy is funding Special Projects activities under SEP to accomplish several important goals:

-To directly involve States in activities to accelerate deployment of energy efficiency and renewable energy technologies;

- To facilitate the commercialization of emerging and underutilized energy efficiency and renewable energy technologies; and
- To increase the responsiveness of Federally funded technology development efforts to the needs of the marketplace.

1.2 SEP SPECIAL PROJECTS PROCESS: States are invited to develop and propose program activities that respond to the competitive categories outlined below. Successful proposals will be awarded as separate grants, the projects, budgets and reports will be separately entered into the WinSAGA system and progress will be individually tracked so that the end-use sector offices can follow the progress of their projects.

Activities will be evaluated and ranked based on the criteria provided under section six below. States will be notified as to what activities were selected for funding. States are strongly encouraged to submit proposals in the categories that are best suited to their overall State energy plans. States can receive information from the respective end-use sector office(s) on specific projects not selected for funding by contacting their Regional Office.

(See sections 420.30, 420.31, and 420.32 for more about the process.)

2.0 SEP SPECIAL PROJECTS FUNDING

2.1 SPECIAL PROJECTS FUNDING: A notice of availability of the 2000 SEP Special Projects financial assistance was published in the Federal Register on November 19, 1999. Approximately $14 million will be available to States to implement activities described in section six below.

States are invited to compete for funds to implement projects under requirements provided in the instructions included in section six. In some instances, depending on the overall results of the technical review and available funding, proposals may be funded at lower levels than originally proposed. Such cases will be negotiated on a case by case basis.

2.2A COST SHARE: The special projects being offered under this notice may have cost sharing requirements, which are specified by each program in section six. Cost shares are stated as percentages (i.e., 20%; 50%, etc.), and represent the part of the total cost of the project that must be provided by the grantee. For example, if the total cost of a proposed project is $100,000 and the required cost share is 50%, the grantee would be required to provide at least $50,000 of the cost and the Federal share would not exceed $50,000.

Funds used to meet recipient cost sharing requirements must comply with 10 CFR part 600.224. They must not, for example, include costs borne by another Federal grant, including salaries paid by SEP formula grants, (unless provided for by statute) or funds or contributions that have been used to meet cost sharing requirements of other Federal grants. Petroleum violation escrow (PVE) funds of the

Warner and EXXON types **may not be used** for cost shares; PVE funds of the Stripper Well type may be used as appropriate.

It is most important that sources and amounts of cost shares be clearly specified in the grant application. This will facilitate the evaluations of the proposals and will expedite the final negotiations prior to the awarding of the grants for projects selected for funding, helping to avoid delays at crucial steps in the process. To assist in this effort to obtain clear and consistent information on cost sharing, we are providing cost share explanation and recommended input sheets in this announcement (see pages 9 and 10 for copies of these.) States applying for grants are urged to provide cost share information in this format.

2.2B COST SHARE USING OTHER FEDERAL FUNDS (IF ALLOWABLE): Six of the end-use sectors have specified that their cost shares must be from non-Federal funds, but four are requiring only that the cost shares be from non-DOE sources. That could provide for the possibility of using other Federal funds for cost sharing if that is allowable under the particular circumstances. In such cases, and where a State has identified other Federal funds to be used in conjunction with DOE funds for the Federal share of the cost, the agencies contributing those funds must provide letters stipulating that their Federal funds may be used in conjunction with DOE funds for the Federal share of the cost of a DOE financial assistance agreement. Such letters should accompany the grant application, and all Federal funds should be listed as such and properly identified as to source in the appropriate places throughout the application.

(See sections 420.31, 420.32, and 420.33, and 10 CFR part 600.224 for more information.)

3.0 APPLICATIONS FOR SEP SPECIAL PROJECTS

3.1 SPECIAL PROJECTS APPLICATION PROCEDURES: Application packages and instructions will be provided by DOE's Regional Offices. Information regarding specific instructions for the individual special project categories can be obtained by contacting the respective DOE representatives specified under section six of this Notice. In addition, States may post questions in a specific section of the Office of Building Technology Assistance website. The web-site should be operational on or about November 30, 1999. The address for that Question and Answer Forum is as follows:

http://www.eren.doe.gov/buildings/state_energy/fy00/sepsp00-forum

Response postings will be updated daily.

Each Special Project proposal must include:

- An introductory cover page that includes:
    - The State's name;
    - The State's name for the project being applied for;
    - The DOE program being applied for (i.e. Rebuild America, etc.), including the particular category if an end-use sector is offering funding for several types of activities;
- The name, address and phone number of the person in the State who will be responsible for programmatic oversight of the project;
- A one or two paragraph abstract of the proposed project that succinctly summarizes what the State intends to do, what it hopes to achieve, and, where applicable, what partners it plans to use in the project;
- The goals and objectives of the project;
- A workplan describing the activities to be performed and implementation schedule;
- Personnel resources and subgrant requirements (if any); and
- The State must provide following application forms as required by DOE's Golden Field Office:
    - Standard Form 424, Application for Federal Assistance;
    - Federal Assistance Budget Information Form, DOE F 4600.4;
    - Budget Explanation Form, GO-PF20;
    - Pre-Award Information Sheet, GO-PF19;
    - US DOE Assurance of Compliance, DOE 1600.5;
    - Certifications Regarding Lobbying; Debarment; Suspension and Other Responsibility Matters; and Drug-free Workplace Requirements; FA-Certs; and
    - Disclosure of Lobbying Activities, SF-LLL.
- Each non-competitively selected first tier subrecipient must provide the Part 1 of a GO-PF20 Budget Information Page for form DOE F4600.4, which must be attached to the State's grant application. After a project has been selected for negotiation, the Regional Office Contracting Officer may require additional information.

Copies of the application forms can be downloaded from the Golden Field Office's web site at the following address: http://www.eren.doe.gov/golden/applicationdocs.html.

SPECIAL INSTRUCTIONS:

The introductory cover page is an extremely important part of the application, as it will be used in reviewing and evaluating the proposal, and in describing the projects in DOE press releases and Special Projects fact sheets and the Special Projects web-site. A sample blank format for this introductory page is included with this guidance (see page 8).

Applicants are encouraged to keep their applications as concise as possible, **with a suggested limit of 10 pages** (or fewer, if specified under section six for a particular sector). The basic application

information, including narrative description and budget, should always be placed first in the application packages. Required forms and attachments such as letters of support would not be included in that limit, but applicants should assure that attachments are germane and as brief as possible.

Project periods must not exceed 24 months (or less, if specified under section six by the end use sector).

Proposals that request Federal funding above any limits on Federal funding specified for a particular project category (or above the estimated total funds available for a category) will not be considered.

Where a State is proposing to serve as the lead State in collaboration with a number of other partner States, **the lead State must specify that it is willing and able to subgrant or otherwise provide funds as needed to its partner States**. Where a group of States wishes to propose a collaboration but there is no State willing or able to meet the requirements of a lead State, each State must submit a separate grant application, with that State's funding needs requested, clearly drafted to spell out the collaborative nature of the project, and the partners involved. DOE would then evaluate and rank such groups of proposals as a single entity.

Please do not glue or tape together the pages of an application or use spiral bindings. Copies that are clipped together are best.

Please make all pages of an application either single sided copies only, or double sided copies only. Applications that are single-sided are preferred.

(See section 420.33 for more detailed application requirements.)

3.2A. STATE APPLICATION DUE DATE: Applications from States for 2000 SEP Special Projects financial assistance must be received at the State's DOE Regional Office no later than February 22, 2000 in order to compete for this Special Projects funding. Please submit a signed original and five copies of each application.

3.2B. PARTNER AND SUBRECIPIENT DUE DATES: Entities that are proposing to participate in a State's Special Project must contact that State to determine what deadline the State has established for the receipt of information it needs to include in its appliction to DOE, as well as any other requirements the State may have.

3.3 REQUESTS FOR EXTENSION: No requests for extensions for the submittal of SEP Special Projects applications will be granted.

3.4 EXPENDITURE PROHIBITIONS AND LIMITATIONS: As provided for under the August 24, 1999 revision to the SEP rule, any special limitations or prohibitions (other than those inherent in the types of projects being sought) on the use of Special Projects funding are specified under the respective program descriptions in this notice.

4.0 SEP SPECIAL PROJECTS SELECTION PROCESS

4.1 ANNOUNCEMENT OF SPECIAL PROJECTS SELECTIONS: 2000 SEP Special Projects selections are expected to be announced in May 2000, with grants to be awarded by the Regional Offices starting in July 2000. The awarding of the grants is dependent upon DOE's receipt of all required grant documentation.

4.1 REGIONAL OFFICE REVIEWS: DOE Regional Office (RO) staff will perform an initial review of all Special Project applications for completeness. This review will include verifying that all the information required is included in the application (and obtaining missing information before forwarding applications to Headquarters), determining that cost shares are appropriate and have been correctly calculated, etc. Applications determined to be complete and satisfactory (from a basic content point of view) will then be forwarded to DOE Headquarters for technical evaluation and ranking.

4.2 PROJECT RANKING: Applications determined by the Regional Offices to be complete and satisfactory will be distributed by staff in OBTA at DOE Headquarters to the respective end-use sector offices where they will be technically evaluated and ranked. DOE anticipates that evaluators will primarily be DOE employees, but where non-DOE evaluators are used, they shall be required to comply with all applicable DOE rules or directives concerning the use of outside evaluators. Evaluators shall be selected on the basis of their professional qualifications and expertise relating to the particular Special Project activity being evaluated.

4.3 PROJECT SELECTION: The end-use sectors will forward their recommended selections to OBTA for a final review that will take into consideration both the geographical diversity of the selections once all the sector recommendations are consolidated, and the importance and relevance of the recommended projects to SEP and the participating end-use sector programs in EERE. The final determinations of projects selected for funding will be made by the Assistant Secretary, EERE.

4.4 ANNOUNCEMENT OF SPECIAL PROJECTS SELECTIONS: 2000 SEP Special Projects selections are expected to be announced in May 2000, with grants to be awarded by the Regional Offices starting in July 2000. The awarding of the grants is dependent upon DOE's receipt of all required grant documentation, and delays in receiving required information from applicants will cause corresponding delays in issuance of grants.

5.0 REFERENCE STATE PLANS, AND REPORTING

5.1 REFERENCE IN STATE PLANS: Special Projects activities must be referred to in State Plans once grants are awarded but the activities will be tracked via the Special Projects grant records in the WinSAGA system, and reports would be filed there. The exact process to be used is currently being developed and will be shared with States and Regional Offices once completed.

5.2 REPORTING: Reporting on Special Projects must provide quarterly progress and financial tracking for each SEP Special Project, as specified in the terms and conditions of award, and following the new consistent reporting format for SEP and SEP Special Projects initiated in fiscal year 2000. A final report summarizing the results of each project must also be provided.

States that are not using the WinSAGA system for reporting must send the required number of copies of their Special Projects quarterly reports to their Regional Office, and must also send one copy to the DOE Headquarters end-use sector liaison specified under part six of this notice for the particular project(s) the State is undertaking.

SAMPLE INTRODUCTORY PAGE FORMAT

2000 State Energy Program Special Projects

End-Use Sector Activity Being Applied For: [use title from section 6 of this Announcement]

State Special Project Title: [try to keep to one line]

State Applying for Grant:

Other States Participating: [if any, please list here]

Amount Being Applied for: [enter the amount being sought from DOE]

Cost Share: [enter amount(s) and source(s) of cost share the State will provide, if applicable]

Planned Completion Date: [when project will be completed]

Congressional District of Project: [if project is in one or more districts, please identify; if Statewide, state that]

Project Description: [provide one or two paragraphs clearly describing the proposed project. All information requested on this sheet, including the project description, should fit on 1 page]

State contact for more information:
[provide the name, address, phone and fax number if available, of the staff person to call if information needed]

Other contacts:
[provide names, etc. of others such as Clean Cities contacts]

STATE ENERGY PROGRAM SPECIAL PROJECTS

PROPOSED COST-SHARE EXPLANATION

Name of Applicant	Title of Project

PROPOSED COST SHARE (AND SOURCES)
(Put each source on a separate line; add lines as necessary if more than one source)

Cash/Source	Third Party In-Kind/Source
$	**$**

In accordance with the Department of Energy Assistance Regulations, "Third party in-kind contributions" are defined as: **Property or services which benefit a federally assisted project or program and which are contributed by non-Federal third parties without charge to the grantee or a cost-type contractor under the grant agreement.** Contributions made directly by grantees are considered to be "same as cash" (regardless of the nature of the contribution).

Cost-sharing must meet the following requirements of the Assistance Regulations:

- It must be verifiable from the grantee's records;
- It must not be included as a contribution for any other federally-assisted project or program;
- It must be necessary and reasonable for the proper and efficient accomplishment of the project or program objectives;
- It must be allowable under the applicable cost principles;
- It must not be paid by the Federal government under another award, except where authorized by Federal statute; and
- It must be provided for in the proposed budget.

In order for the Department of Energy to properly evaluate the proposed cost-sharing contributions, each applicant for State Energy Program Special Projects funding shall provide the information specified on the attached worksheet FOR EACH SOURCE of third party in-kind contributions.

Name and Address of Contributor

Nature of Contribution	**Estimated Value of Contribution**	**Basis of Valuation**
Personnel		
Fringe Benefits		
Travel		
Equipment		
Supplies		
Contractual		
Other (Specify)		
Other (Specify)		
Other (Specify)		
Other (Specify)		
Other (Specify)		
Indirect		
TOTAL		

6.0 SPECIAL PROJECTS OPTIONS FOR 2000:

6.1 TRANSPORTATION TECHNOLOGIES: CLEAN CITIES/ALTERNATIVE FUELS

Legislation: These Clean Cities/Alternative Fuels programs are authorized under Section 505 of EPACT, under the title Voluntary Supply Commitments.

Estimated Funds Available:	$2.7 million
Estimated Number of Projects	See section below on Projects Requested
Funding Ceilings:	See project descriptions under Projects Requested in 2000 section below for any project funding ceilings.
Cost Share:	A 33 1/3% non-DOE cost share is required for categories 1,2, and 3. A 50% non-DOE cost share is required for categories 4 and 5. For example, where a 33 1/3% cost share is required, and the total cost of the project is $150,000, the DOE share would not exceed $100,000 and the grantee's cost share would be at least $50,000. Where a 50% cost share is required, and the total cost is $40,000, the DOE share would not exceed $20,000 and the grantee's cost share would be at least $20,000. See page 3 for more information about the use of other Federal funds for cost sharing.

Background

The goal of the U.S. Department of Energy's (DOE) Clean Cities program is to accelerate the development of a sustainable alternative fuels market through public/private Clean Cities partnerships formed around the country. The program will continue to provide funds to State Energy Offices for Special Projects to support Clean Cities' alternative fuel vehicle (AFV) and advanced technology vehicle (ATV) projects within each State, strengthening the relationship between the Federal, State and local government partners and private sector Clean Cities stakeholders.

For the 2000 Special Projects, the Clean Cities program is offering funding in five categories to help ensure that local Clean Cities coalitions are vibrant, active coalitions enabling fleet customers to increase their use of AFVs and ATVs:

1. projects that promote the purchase of commercially-available AFVs, especially when those AFVs are dedicated fuel or contribute to a niche market AFV fleet;
2. projects that provide incremental costs to offset the purchase price of AFV school buses;
3. projects that promote AFV infrastructure development; and
4. projects that demonstrate fuel cell vehicle and infrastructure technologies; and

5. projects that fully fund, with the cost sharing contribution, the salary of a Clean Cities coordinator.

Procedural Guidelines

- Fuel Provider fleets covered by the Energy Policy Act (EPACT) are not eligible to receive funds to purchase vehicles for their own fleets under Category 1. Fuel providers, as participating private-sector partners, must be in compliance with the EPACT alternative fuel vehicle acquisition rule in order to be eligible to receive Clean Cities funding under Categories 2, 3, and 4.

- States must submit Special Project proposals for alternative transportation fuel projects in partnership with their local, officially-designated Clean Cities coalition.

- Only those projects located in active, designated Clean Cities are eligible for funding. An "active" coalition is one with a valid and approved Memorandum of Understanding with DOE. A designated coalition has held a DOE authorized designation ceremony, or has been approved for designation by the time of submission of the grant proposal.

- All proposals must have letters of commitment indicating where the matching funds are coming from and the amount.

- A letter of support from each participating Clean Cities coalition explaining the importance of the proposed project to the coalition's objectives must be attached to the proposal to be considered for funding.

- If the proposer is interested in requesting funding for more than one of the five categories described below, a **separate** proposal for each subject area must be submitted for evaluation.

- A final report will be a requirement for any awards made. Information to be collected includes, but is not limited to: number of AFVs purchased; miles driven and maintenance costs; volume of alternative fuel purchased; lessons learned; successful community outreach; and location of any AFVs resold in the market and resale value.

- Proposals which request funds for a particular category that exceed the funding limitations specified below will be considered as non-responsive.

- Any vehicles that are purchased with SEP Special Projects funds must display a Clean Cities decal provided by DOE.

Projects Requested in 2000

Category 1: Projects that promote the acquisition of AFVs in fleets. Funding is available for the incremental cost of AFVs, with special emphasis on dedicated AFVs or AFVs that will maximize

alternative fuel use (including medium and heavy duty vehicles), for use on roads and highways. "Niche" market fleets (such as shuttle applications, taxi fleets, law enforcement vehicles, station cars, delivery fleets, health care services, welfare to work, etc.) will be of particular interest, especially projects that have the potential to have 100% AFV penetration in the fleets. Any vehicles which are purchased with SEP funds must display a Clean Cities decal provided by DOE. In this category, the Clean Cities program is interested in funding approximately ten (10) to fifteen (15) projects not to exceed $100,000 per project.

Category 2: Projects that deploy alternative fuels school buses. Funding is available to support DOE's Energy $mart Schools initiative, with a focus on deployment, rather than technology development; therefore, no projects involving the use of prototype technology will be funded. Alternative fuel school buses deployed as a part of this project must use emissions certified engines from original equipment manufacturers (OEMs). A plan for collecting and reporting reliability and performance data must be included in the proposal. Any vehicles which are purchased with SEP funds must display a Clean Cities decal, provided by DOE. In this category, the Clean Cities program is interested in funding approximately four (4) to eight (8) projects not to exceed $100,000 per project in this category.

Category 3: Projects that promote the development of an AFV refueling infrastructure. Infrastructure projects include new or upgraded AFV fueling sites. Project proposals should include the fuel type, estimated fuel use (i.e. fuel volume) and the projected number of AFVs that will use the facility. Projects that include fleet commitments for fuel purchases at the fueling site will be of particular interest. All refueling sites proposed for funding must be open to the public. If the proposal is to support a billing system, it must be for a universal card billing system. Special consideration will be given to proposals that demonstrate compatibility and integration with similar universal card access systems already serving alternative fuel stations in designated Clean Cities or "Corridor" regions. In this category, the Clean Cities program will consider funding approximately four (4) to six (6) projects not to exceed $150,000 per project in this category.

Category 4: Projects that demonstrate fuel cell vehicle and infrastructure technologies. Funding is available for projects that provide demonstration and evaluation of near commercial fuel cell technologies in light duty vehicles and buses. Projects should address infrastructure development, safety, training and service requirements, and other matters related to the potential deployment of large numbers of fuel cell vehicles and supporting infrastructure. Projects should provide the opportunity for demonstration and evaluation of fuel cell vehicles and refueling infrastructure. Proposals should address the potential oil reductions and pollution reductions from the use of fuel cell technologies. Close coordination with original equipment manufacturers, fuel suppliers, air quality agencies, and local governments is required. In this category, the Clean Cities program will consider funding one (1) project not to exceed $300,000. A 50% cost share is required.

Category 5: Full-time coordinator positions. Coordinator responsibilities include, but are not limited to: organizing and holding "Advancing the AFV Choice" events; developing fund-raising strategies and/or writing grant proposals; holding public education and outreach campaigns; developing legislative strategies; and developing and promoting training programs on the maintenance and operation

of AFVs. The Clean Cities program will consider funding approximately eight (8) projects not to exceed $20,000 Federal funds per project in this category. Proposals must demonstrate a cost share of 50% of the cost per project.

Evaluation Criteria Categories 1, 2, 3 and 4:

Proposals submitted in categories 1, 2, 3 and 4 will be evaluated and ranked by the following criteria:

1) Probability of project success based on the technical feasibility of the project and participation of appropriate team members. (25 points)

2) Probability of project success, as indicated by coalition past performance and/or future potential. Grading factors will include: successful prior project deployment and grant implementation; coordination and consistency with previously documented coalition goals; quality and quantity of participating stakeholders and partners; probability of leveraging future resources. (20 points)

3) Energy-related benefits as indicated by the number of alternative fuel refueling stations introduced as a result of this project and/or by projected number of AFVs or ATVs introduced and their estimated alternative fuel consumption. (20 points)

4) Ability of the project to strengthen the Clean Cities coalition to meet its Program Plan/MOU goals for alternative fuel vehicle(s) in the region, infrastructure deployment, and fleet operator recruitment and outreach or ATV deployment. (15 points)

5) Visibility of project activities – probability of increasing awareness and acceptance of alternative fuels and AFVs among target sectors in the local community, including, but not limited to, current stakeholders, fleet operators, media, and the general public. (10 points)

6) Greater than a 33 1/3% cost share participation. Leveraging and active participation from other coalition stakeholders and partners are strongly encouraged. (10 points)

Bonus Points

Special consideration will be given to **Category 3** Infrastructure Projects located in the Federal AFV USER (Utilization Supporting Expansion of Refueling) Group Programs in the following six cities: Albuquerque, NM; Denver, CO; Melbourne/Titusville/Kennedy Space Center, FL; Minneapolis/St. Paul, MN; Salt Lake City, UT; and San Francisco, CA. (5 points)

Evaluation Criteria Category 5:

Proposals submitted in Category 5 will be evaluated by the following criteria:

1) Ability to strengthen the Clean Cities coalition to meet its Program Plan/Memorandum of Understanding (MOU) goals for: (a) alternative fuel vehicle and infrastructure deployment; (b) fleet

operator recruitment and outreach; and public education and information. (35 points)

2) Probability of success, as indicated by coalition past performance. If there is no record of past performance, the proposal can be evaluated on future potential. Grading factors will include: successful prior project deployment and grant implementation; coordination and consistency with previously documented coalition goals; quality and quantity of participating stakeholders and partners; probability of leveraging future resources. (30 points)

3) Visibility of coordinator activities – probability of increasing awareness and acceptance of alternative fuels and AFVs among target sectors in the local community, including, but not limited to, current stakeholders, fleet operators, media, and the general public. (20 points)

4) Greater than a 50% cost share participation. Leveraging and active participation from other coalition stakeholders and partners are strongly encouraged. (15 points)

Program Policy Factors

The DOE Clean Cities program will apply program policy factors. The following factors will not be point scored but will be assessed. They include: geographic location of applicant, diversity of alternative fuels, and demonstrated need for Federal funding.

Program Contacts:

Headquarters:	Dorothy Wormley		(202) 586-7028
Regional Offices:	Atlanta	David Godfrey	(404) 347-7140
	Boston	Michael Scarpino	(617) 565-9716
	Chicago	Melinda Latimer	(312) 886-8582
	Denver	Ernie Oakes	(303) 275-4817
		Dan Deaton	(972) 491-7276
	Philadelphia	James Ferguson	(215) 656-6977
		Patricia Passarella	(215) 656-6966
	Seattle	Roxanne Dempsey	(206) 553-2155
		Ernest Rios	(510) 637-1950

6.2 INDUSTRIAL TECHNOLOGIES

Total Funds Available:	$2.8 million
Estimated Number of Projects:	14 projects with a maximum of $200,000 in Federal funds per project per year
Cost Share:	Cost share of 20% and up from non-Federal funds is encouraged. For example, where a 20% cost share is proposed, if the total cost of the project is $100,000, the Federal share would be $80,000 and the grantee's cost share would be $20,000.

Goal

The goal of this solicitation is to broaden the impact of investments in advanced industrial technologies for energy savings and waste reduction supported through the implementation of the nationally developed industry visions and technology roadmaps. This goal will be accomplished by the formation of strong State Government/Industry partnerships working to: 1) identify key target industries and their importance to the State economy; 2) facilitate the formation/involvement of target industry alliances; 3) garner the involvement/support of high level State officials; 4) establish State-wide energy saving targets for those key industries; 5) develop and implement a State-wide plan to meet those energy targets; 6) coordinate/leverage activities with similar State initiatives and; 7) identify the necessary resources from the State, Federal Government, and industry which can be applied.

Background

The mission of the Office of Industrial Technologies (OIT) is to improve energy efficiency, environmental performance, and productivity of materials and process industries by developing and delivering advanced science and technology options that will: (1) lower raw material and depletable energy use per unit output; (2) improve labor and capital productivity; and (3) reduce the generation of wastes and pollutants. OIT accomplishes its mission through its *Industries of the Future* strategy, which focuses on nine energy-intensive and waste-intensive industries: Agriculture, Aluminum, Chemicals, Forest Products, Glass, Metal Casting, Mining, Petroleum Refining, and Steel.

The *Industries of the Future* strategy entails three key processes, each carried out by individual partnerships between OIT and targeted industries. It begins with bringing an industry together to collectively identify issues and develop an industry-wide vision of where it could be in the next 10 to 20 years. This is followed by developing an industry roadmap(s) that identifies and prioritizes the efforts needed to achieve the goals of the industry vision. The final step involves implementing a prioritized research agenda to develop and deliver technology solutions to meet the identified industry needs and thus to accomplish the industry roadmap(s). OIT's initial role is therefore to act as a facilitator in bringing an industry together and in assisting the industry in creating its vision and developing its roadmap(s). The OIT role then evolves into acting as a collaborator who cost shares R&D with an industry to implement its technology roadmap(s). Functioning in this partnership capacity, OIT provides each targeted industry with integrated products and services, encompassing such functions as technical and financial assistance, information distribution, policy evaluation and support, and market analysis, all of which are critical to the successful execution of each of the three key processes mentioned above. Information about IOF visions and roadmaps and specific OIT products and services in the areas of research, development, demonstration, and financial and technical assistance can be found on the OIT web site (http://www.oit.doe.gov).

Projects Requested in FY 2000

This FY 2000 solicitation seeks projects that specifically target State implementation of the *Industries of the Future*. The goal is to widen the impact of investments and implementation of industry visions and technology roadmaps on energy savings and waste reduction. This goal will be accomplished through building strong collaborations among and obtaining wide participation from related industries within the States. Building off national visions and roadmaps, the State implementation will result in a greater impact because more companies will become involved in developing and implementing new energy efficiency and waste reduction technologies as well as in adopting technological advances introduced by the OIT/industry partnerships. The State/industry partnerships will also allow other OIT products and services, such as financial and technical assistance, to be delivered in a more coordinated way to a broader base.

This solicitation seeks proposals that would implement the *Industries of the Future* processes in individual States to establish State government partnerships with one or more of the industries listed below, over a maximum duration of two years:

Agriculture
Aluminum
Chemicals
Forest Products
Glass
Metal Casting
Mining
Petroleum Refining
Steel

New Partnerships

For each new State government/industry partnership proposed in response to this solicitation, proposals must address all of the following task requirements:

- Identify target industries in the State and their importance to the State and/or regional economy.
- Identify significant industrial companies in target industries.
- Facilitate the formation of target industry alliances involving significant industrial companies and other organizations such as industrial associations, government laboratories and centers, and universities; deliver information and/or technical and financial assistance on OIT products and services; and target appropriate *Industries of the Future* audiences.
- Establish a State *Industries of the Future* approach, coordinated with other related State initiatives, to envision industry-defined performance goals with specific targets in State energy savings, pollution prevention, and productivity improvements over a time period of five, ten or more years.
- Develop and implement an action plan describing what State industries would do to accomplish the defined performance goals. The plan must address and provide specifics about each of the key elements below:
    1. defining industry priorities of research needs and associated performance targets, using the national-level *Industries of the Future* visions and roadmaps as guidance;
    2. implementing a prioritized research agenda defined by State industries;
    3. obtaining resources necessary to support research programs and identifying organizations (companies, research institutions, and universities) that would be involved—**the grant from this solicitation, however, shall not be used to directly support any research and development activities**;
    4. identifying how State industries could have better access to and/or be more engaged in the national-level *Industries of the Future* visions, roadmaps, and activities; and
    5. defining how State industries could make better use of available services and products from the OIT and other Federal, State, and non-governmental organizations.
- Develop and deliver training and other information dissemination activities to facilitate implementation of *Industries of the Future* at the State level.
- Describe products, services, and deliverables to be produced under the grant.

Existing Partnerships/Continuing Work

For States proposing continuation of current work where some of these task requirements are completed, brief summaries of the results should be provided for the completed task area(s). Additionally, these projects are required to conduct a technology showcase* demonstration to promote the use of advanced industrial energy and environmental process technologies in the industry where continued support of the partnership between the State government and this industry is sought.

*A Showcase Demonstration is a public event designed to highlight the benefits/pay-off of a comprehensive approach (investments in near-term continuous improvements as well as longer-term

leapfrog advancements in process technology) to energy-efficiency and resource productivity. The event is sponsored by an industrial company, with support from DOE/OIT as well as trade or industry associations, and held at one or more of their plant sites. The Showcase may include workshops, seminars, facility tours, and presentations. It is open to the public and covered by the media.

Evaluation Criteria

1. Clear understanding of the State's industry profile supporting an estimate of the impact on the State economy of anticipated energy savings, waste reduction, and productivity improvements. (25 points)
2. Viability of approach for achieving desired outcomes in the State, including assessment of the extent of industry involvement in the project. (20 points)
3. Understanding of the *Industries of the Future* strategy and processes, and maximized use of national-level visions, roadmaps, and activities, as well as OIT products and services to guide and facilitate State implementation. (20 points)
4. For **new** State/industry partnership: clearly stated project deliverables and measures of success identified and tied to the solicitation goal. (15 points)
   For **continued** State/industry partnership: magnitude and extent of the planned technology demonstration showcase (15 points)
5. Cost sharing and resource sharing of State/industries/other organizations. (10 points)
6. Qualifications and ability of the project team, including State, industry, and subcontractor (if any) personnel to complete the work successfully. (10 points)

Program Contacts

Headquarters:	James Quinn		(202) 586-5725
Regional Offices:	Atlanta	Timothy A. Eastling	(404) 347-7141
	Boston	Scott Hutchins	(617) 565-9765
	Chicago	Julie Nochumson	(312) 886-8579
	Denver	Gibson Asuquo	(303) 275-4841
	Philadelphia	Maryanne Daniel	(215) 656-6964
	Seattle	Julia Oliver	(510) 637-1952

6.3 BUILDING TECHNOLOGIES

6.31 BUILDING TECHNOLOGIES: CODES AND STANDARDS

Legislation: This Codes and Standards program is authorized under Title III of the Energy Conservation and Production Act, as amended. The EPACT title covering the program is: Section 304(2)(B)(e), Availability of Incentive Funding (for States), under Section 304, Updating State Building Energy Codes.

Estimated Funds Available:	$4,200,000
Estimated Number of Projects:	10-20 not to exceed $400,000 total Federal funds per State
Funding Ceiling:	No more than a total of $400,000 in projects will be awarded to any one State.
Cost Share:	At least a 25% non-Federal cost share is required. For example, where the total cost of the project is $100,000, the Federal share would not exceed $75,000, and the grantee's cost share would be at least $25,000.

Background

Section 304 of the Energy Conservation and Production Act, as amended, requires States to update their commercial building energy codes to meet or exceed the American Society of Heating, Refrigerating and Air Conditioning Engineers and the Illuminating Engineering Society of North America (ASHRAE/IESNA) Standard 90.1-1989, or its successor(s) that DOE has determined would improve energy efficiency in commercial buildings. States are also required to consider whether to meet or exceed the 1992 Model Energy Code (MEC) or its successor(s) that DOE determined would improve energy efficiency in residential buildings. On December 6, 1996, DOE published its determination regarding the 1995 Model Energy Code in the Federal Register. The Department is currently preparing a determination regarding the 1998 International Energy Conservation Code (formerly the Model Energy Code), and has initiated analysis of the energy savings of Standard 90.1-1999, in anticipation of its publication in the February 2000 time frame. DOE is required to provide technical assistance and incentive funding to respond to this legislative requirement. The Department is expecting to publish its determination regarding Standard 90.1-1999 shortly after its publication in 2000.

Projects Requested in 2000

The Office of Building Technology, State and Community Programs is providing incentive funding to support State actions to adopt, update, implement, enforce and evaluate the effectiveness of their residential and commercial building energy codes. These actions will enhance the energy efficiency of residential and commercial building stock in the United States and provide environmental benefits.

States that have adopted energy codes that meet or exceed the 1995 Model Energy Code and Standard 90.1-1989 are encouraged to evaluate the effectiveness of their programs, refine them, and work toward the adoption of the next generation building codes, such as Standard 90.1-1999 or future editions of the International Energy Conservation Code (formerly the Model Energy Code), that achieve even higher levels of cost-effective efficiency.

States are encouraged to partner with other States and interested entities to make maximum use of resources and share expertise. Letters of commitment from third parties must be attached. Performance on prior year grants will be considered in the evaluation criteria.

Proposals

Each proposal must include a detailed description, a time line and a budget, itemized by task. Proposals should be formatted to make the following required items easy to locate and the evaluation criteria, related to those requirements, easy to apply. The proposal should not exceed 10 pages in length, excluding the required forms. All pages must be numbered.

Proposals must include:

1. Technical Narrative. Address how the lead or coordinating agency intends to update their State and local building codes, or if codes have already been adopted, how it intends to improve code compliance, through training, technical assistance, etc. Include the adoption process for energy codes at both the legislative and administrative level as well as by the local building community. Fully describe the methodology for implementation of new energy codes including training and information transfer elements. Identify building community partners and their role in the process. Include government, local code officials, builders, architects, and energy technology suppliers, and utilities and environmental or other public interest allies, if appropriate. Identify the need for the project, desired outcome, results, and benefits. Describe the steps to be taken to achieve the desired goals. In addition, all deliverables should be identified, such as training manuals, brochures, graphics, videos, etc. Indicate if these will be delivered in an electronic format and be reproducible.

2. Workplan and Milestones. Describe how the proposed project will be developed and implemented. Identify goals using measurable results and provide a schedule for completion. Identify facilities, equipment, personnel and other resources necessary for this project. Explain the relationship (if any) to any prior year grant received.

3. Qualifications and Accomplishments. Identify and describe lead agency, key personnel and other partners, including their qualifications, experience and expertise as it relates to successfully carrying out this project. If previous DOE grants to update, implement, or enforce the State's codes have been received, describe the progress and accomplishments to date in meeting the goals established for the previous grant(s).

4. Innovative, Technology Transfer and Advanced Code Elements. Describe any unique or innovative components of this project. Describe any components of the program that will expedite the adoption

and implementation of improved energy codes in other States or regions or the transfer of information or techniques to other States or regions. Describe any components of the program that will hasten the adoption of codes which exceed the requirements of ASHRAE 90.1-1989 or the 1995 MEC. (This is a given, points are listed below.)

Special Conditions

The grantee is required to complete a final report and provide an annual presentation of its objectives and accomplishments of the project at the "Annual DOE National Conference on State Building Energy Codes." The grantee must budget funds to attend the 2000 and 2001 conferences. The dates and locations of the 2000 and 2001 conferences will be announced at a later date.

A final report shall summarize all work completed under this project. Include in the report dates of significant events, number of people affected, estimated energy savings, other benefits of the project, and key products produced.

Evaluation Criteria

State proposals will be ranked according to the following criteria:

1. APPROACH: (35 points) Ability of the project to significantly contribute to the adoption, implementation, or enforcement of building energy codes which exceed Standard 90.1-1989 and the 1995 MEC, or to significantly contribute to the evaluation of building energy code implementation and enforcement.

2. QUALIFICATIONS: (30 points) Ability of the project team to complete the work successfully, including qualifications of key agencies and personnel. Experience and past success in adopting or updating, implementing, and evaluating building energy codes are key.

3. POTENTIAL IMPACT: (20 points) Anticipated benefit of project activities. The number and percentage of buildings (or square feet constructed) impacted and estimates of potential and quantifiable energy, economic, and environmental benefits. Estimated number and percentage of jurisdictions adopting/enforcing energy codes and the estimated number of people trained will also be considered. Long-term commitment of state and partners after Federal funding expires. The ability of the project to introduce innovation, transfer information/techniques to other States or regions resulting in wider adoption, implementation and enforcement of building energy codes, or introduce more advanced energy codes.

4. COST SHARE: (15 points) Cash or in-kind contribution over the required 25% cost share. If cost share is from an organization other than the applicant, letters of commitment must be attached to be considered.

Expenditure limitations

The purchase of land, buildings, vehicles, energy efficiency or renewable energy equipment; construction; capital improvements or equipment; or building retrofits are examples of expenditures that are not allowed.

Note: This is not an exhaustive list of what cannot be done under one of these grants; it is an attempt to point out major items that are not allowed.

Program Contacts

Headquarters (for technical information): Margo Appel (202) 586-9495

Regional Offices (for additional information):

Atlanta	Traci Leath	(404) 347-0236
Boston	Sam Thomas	(617) 565-9732
Chicago	Michael Peterson	(312) 886-8577
Denver	Steve Palomo	(303) 275-4838
Philadelphia	Darren Stevenson	(215) 656-6970
Seattle	Carole Gates	(206) 553-1165

6.32 BUILDING TECHNOLOGIES: REBUILD AMERICA

Estimated Funds Available:	Up to $1,600,000
Estimated Number of Projects:	The number of proposals awarded will depend on the quality of the proposals received.
Funding Ceiling:	A $200,000 cap is placed on Federal funds awarded to successful State proposals. A $250,000 cap will be placed on Federal funds for joint proposals (submitted by one State on behalf of other States). It is expected that awards of Federal funds will range from approximately $50,000 to $200,000 each.
Cost Share:	At least 50% of project cost must be from non-DOE funds, with credit given for higher percentages of non-DOE funds. For example, where the total cost of the project is $100,000, the DOE share would not exceed $50,000, and the grantee's cost share would be at least $50,000. (See part C-5 for additional information) See page 3 for more information about the use of other Federal funds for cost sharing.

A. Background

Rebuild America helps community partnerships increase the energy efficiency of commercial and multifamily buildings, schools, public facilities, and public housing. Partnerships can be led by any public or private sector organization (but must include at least one State or local government agency) and could include economic development organizations, energy service companies, financial institutions, utilities, private businesses, nonprofit organizations and others interested in economic growth, community development, and environmental responsibility. DOE is an active partner in each partnership. There are currently about ***240*** Rebuild partnerships in over ***45 States***. Some of these partnerships have received direct seed funding from DOE in the past. However, it is now DOE's intent to support Rebuild partnerships through State energy offices and SEP Special Project funding described in this section.

Partnerships joining the program agree to develop an Action Plan within one year. DOE helps partnerships develop their action plan and carry out energy efficient building retrofits. DOE encourages the integration of energy with other local priorities during the planning process. Examples of topics that could bring a community together include neighborhood revitalization, main street economic growth activities, sustainability, rebuilding school infrastructure, communities of the future, downtowns for tomorrow, etc. The Action Plan should be tailored to meet unique priorities of the local community.

DOE helps partnerships by providing assistance that fills key needs on a short-term basis to help organization, planning, or implementation activities to leap hurdles or proceed more quickly. The Rebuild America program provides a range of planning, marketing, technical, and financial assistance products and services that will help organizations form partnerships, and develop and implement State-wide or community-wide Action Plans. Rebuild America services may be delivered to a single partnership on site, or via phone, or may be provided in a workshop or training format to a group of partnerships. These services are provided to partnerships through Regional Teams led by staff from the DOE Regional Offices. (Regional Teams are supported by the National Rebuild America Program Team). Individuals responsible for serving as the primary contact for Rebuild America partnerships as members of the Regional Teams are called Program Representatives. These Program Representatives are critical to accomplishing building retrofits. DOE believes that States are best suited to serve as Program Representatives for partnerships within their borders. Therefore, States applying for funding under this solicitation should assign a person or persons as Rebuild America Program Representative.

B. Projects Requested in FY 2000

The goal of the 2000 Rebuild America Special Projects solicitation is to strengthen our Program Representatives abilities to serve partnerships and expand the existing partnerships. States are encouraged to use Rebuild America as a "gateway" program to understand and address the broad multi-sector needs of communities. To achieve this goal, DOE is seeking proposals from States which: 1) Establish/Continue a State role as Program Representative for Rebuild America; and 2) Support partnership proposals that strengthen the program. These two objectives are described in sections #1 and #2 below.

1) Establish/Continue a State Role as Program Representative for Rebuild America

DOE's intent is to have designated individuals in each State working with the Rebuild America Regional Teams as Program Representatives to: a) provide services to existing partnerships within their State and help expand existing partnerships and b) raise the awareness of the program and recruit additional qualified partnerships into the program. Program Representatives currently include staff from DOE Regional Offices, States, and DOE contractors.

These Special Projects provide support to allow States currently serving as Program Representatives to continue in that capacity and seeks to add additional State Program Representatives in States not currently serving in that capacity. As members of the Rebuild America Regional Teams, State Program Representatives will be responsible for:

Marketing

- Informing State organizations and communities about the benefits being realized by current partnerships with the Rebuild America program, the requirements of the program, and the assistance available to help achieve desired results in your State.
- Direct marketing to State and community leaders, focusing on finding local champions for State-wide and community-wide efforts.
- Providing the content for at least one case study per year for the most successful partnership in the State.

Planning Assistance

- Assisting new partnerships in partnership organization and development.
- Assisting or obtaining assistance for planning and development of Action Plans.

Implementation

- Assuring that technical assistance products and services are available to partnerships to aid them in carrying out their *completed* Action Plans.
- Helping partnerships to expand by including more organizations and participants in evolving and working partnerships.
- Assisting pre-existing partnerships in the State with obtaining assistance and achieving progress.
- Identifying State Energy Office programs which could provide additional resources for the Rebuild America program. For example, many States have energy audit, financing, and special topic programs available.
- Identifying successful products developed for State programs that could be used nationally by Rebuild America partners.
- Fostering and supporting peer-to-peer exchanges amongst Rebuild America partnerships in their States.
- Reporting, on at least a quarterly basis, performance metrics of partnerships in their States using a spreadsheet provided by DOE. These metrics will include: number of buildings being retrofitted, square feet of retrofitted space, type of building, type of financing, amount of investment, energy savings, and payback.

Communication

- Maintaining regular communications with partnerships and other participating organizations within the State.
- Maintaining regular communications with the Rebuild America Regional and National Teams by telephone, on-site visits, and/or electronic media.
- Attending Rebuild America meetings, workshops, and conferences.

Offices receiving grants shall designate a lead person to be the Program Representative. In addition to assisting partnerships, this person shall participate in all team activities, e.g. monthly conference calls, team meetings, workshops, annual forums, etc. Awards may be used to pay for staffing, travel, and other related expenses for personnel within the State Energy Office who are responsible for Rebuild America activities.

2) Support Partnership Proposals to Strengthen the Rebuild America Program

Where a State has (or proposes to establish) a Program Representative, funds may be used in various innovative ways to enhance or expand community partnerships. This could include States that are currently serving as Rebuild America Program Representatives but are not requesting funds for that purpose through this solicitation. DOE funds shall not be used for capital improvements including energy retrofits. (Note: Program Representative duties and responsibilities must be consistent with those listed in this solicitation).

As an example, partnership proposals could cover such activities as:

- Staff support
- Anything that builds capacity within partnership to sustain activities
- Any activity which increases availability of local project financing
- Any activity which provides benefits for multiple partnerships in a State or region
- Anything that encourages flow through of funds to local partnerships
- Using Rebuild America as a "gateway" program to understand and address the broad multi-sector needs of communities. (Including approaches that propose to blend Rebuild America with other DOE and non DOE Programs to better address these community needs.)

Proposals must be:

- Designed to address needs and or opportunities of a community partnership(s),
- Consistent with the focus and intent of Rebuild America,
- Highly leveraged with State, local or other resources, and
- Targeted at partnerships that have begun implementation of their Action Plans.

While proposals may address any substantive aspect of enhancing or expanding a partnership and address any aspect of community energy usage within the scope of Rebuild America, DOE is particularly interested in proposals which seek to comprehensively address the needs of K-12 schools, a priority sector within Rebuild. In support of its new EnergySmart Schools initiative, DOE is interested in proposals which seek to transform entire school districts in a manner that would serve as a model for the State/Nation. The Rebuild America partnership should focus on overcoming policy, technical, and financial barriers to energy efficiency and renewable energy application in targeted school district(s). Specifically DOE is seeking proposals to expand partnerships targeting K-12 that encompass:

- building retrofits and new construction
- transportation
- education programs
- procurement practices
- linkages between school facilities and activities within the surrounding community

C. General Guidance

- No more than one proposal per State may be submitted. Example: Two agencies in the same state may not submit separate proposals. This does not preclude a State from also participating in a joint proposal with other States.

- Joint proposals, submitted by one State on behalf of other States, are acceptable. A cap of $250,000 is placed on the amount of Federal funds that can be awarded to successful joint proposals.

- DOE reserves the right to fund partial proposals from States submitting proposals requesting DOE funding for activities described in **both B.1 and B.2** above.

- Projects submitted for consideration must be cost shared by at least 50%. This means that the DOE share of the proposed project budget cannot exceed 50% of the total. For example, if a project being proposed is estimated to cost $100,000, the applicant can request no more than $50,000 in DOE funding.

  It is important to note that this solicitation requires a cost share, and cost share and match are not necessarily synonymous. A solicitation may require a match, where the applicant has to provide funding that equals a prescribed percentage of the Federal dollars being requested. Where this is required, what drives the applicant's contribution is the amount of Federal funding being requested - the match is a percentage of the Federal funding requested. In a cost share situation, such as in this solicitation, what drives the applicant's contribution is the estimated cost of the project - the cost share is a percentage of the total project budget.

  The applicant's contribution in a cost shared proposal must be comprised of costs associated with the scope of the project being proposed. For example, if the scope of a proposed project involves the marketing of Rebuild America benefits to potential community based partnerships, the cost share (the applicant's contribution toward the project budget) cannot come from building efficiency investments made in other, existing partnerships. The cost share would have to be comprised of costs associated with the proposed marketing activity.

  There are certain restrictions on what types of costs can be included as contributing to an applicant's cost share. Program income, for example, cannot be counted toward meeting a cost share requirement. If other (non-DOE) Federal funds are proposed, the agencies contributing those funds must provide letters stipulating that their Federal funds may be used in conjunction with DOE funds for the Federal share of the cost of a DOE financial assistance agreement.

  If you are unclear regarding any aspect of the cost share requirement, you should check with your regional point of contact.

D. Proposal Preparation

Proposals ***must*** include the following sections:

1. APPROACH: Describe the approach that will be used to address the project responsibilities outlined above. Cover each appropriate bullet item in Section B1 or B2, depending on the type of project proposed, and identify how each will be addressed. An item by item description is preferred.

2. STAFF RESOURCES - Identify a lead person in the State Energy Office who will have the Program Representative responsibilities listed in this solicitation. Describe education (brief), experience, skills, and accomplishments which clearly demonstrate his or her ability to carry out these responsibilities. Include the amount of time this lead person would have available to devote to program. Describe knowledge and experience with marketing, building retrofits, and energy project financing. Identify other personnel, and their skills and expertise, that will be made available to back-up and support the lead person as well as the Rebuild America partnerships within the State.

3. POTENTIAL IMPACT - Provide an estimate of the number of partnerships you hope to form or expand over the next two years. Provide a rough estimate of the potential energy, economic, and environmental benefits of these partnerships. Describe additional benefits expected. Provide a list of current Rebuild America partnerships in the State, and describe any ongoing assistance efforts and/or existing relationships with current Rebuild America communities.

4. STATE GOALS/PRIORITIES: Describe how the goals and priorities of the State will be served by participation in the Rebuild America program. Describe how the goals and priorities of State-wide organizations and communities will be served by participation in this program.

5. STATE WIDE PROGRAMS - Describe programs/resources of the State or others within the State that can be made available or tailored to Rebuild America partnerships. These should include local/community resources.

6. PAST ACCOMPLISHMENTS - Please provide a section on accomplishments and results initiated within the State related to the goals and objectives of the Rebuild America activity. If the State has previously received a grant to do work related to Rebuild America, please compare planned versus actual accomplishments through these efforts, and explain reasons for major variations.

7. BUDGET - Provide a breakdown of budget request. Clearly show what the funds will be used for and how much, if any, will be go directly to partnerships. If funds are to be passed through to local partnerships for non-construction capital improvement, the proposal should identify how these funds will substantially leverage other local resources.

<u>Additional Information</u>

Please include phone, fax, and e-mail of both the office director, and of the proposed lead person for this special project.

The proposal should not exceed 10 pages in length, excluding the required forms.

All States and territories are eligible.

Period of Performance: Up to 2 years

E. Evaluation Criteria

State proposals will be evaluated and ranked according to the following criteria:

1. APPROACH (25 points): How viable is your approach for achieving the desired outcomes? What understanding is demonstrated of the needs and expected benefits of State-wide organizations and individual communities? Does the approach demonstrate experience with barriers in the State and potential solutions to those barriers? Does the approach build on established networks of organizations at the State and local level?

2. STAFF RESOURCES (25 points): DOE considers communications/people skills to be the most important ingredient of successful Program Representatives. Does the proposal clearly identify a lead person to be the Rebuild America Program Representative with the knowledge, skills, and ability to meet the responsibilities listed above? Does the State Energy Office have other staff with similar abilities to provide backup and assistance?

3. POTENTIAL IMPACT (15 points) - Expected number of new and/or expanded partnerships. Estimates of potential and quantifiable estimates of energy, economic and environmental benefits. Identification of significant other benefits. Commitments from prospective partners.

4. GOALS AND PRIORITIES (10 points): How well does Rebuild America fit within goals/priorities of the State? How will Rebuild America serve the needs of its organizations and communities?

5. STATE WIDE PROGRAMS (10 points): What results in the last 5 years in the development of community partnerships involving energy efficiency and renewable energy can be attributed to actions taken by the State Energy Office? Does the State Energy Office or others have program resources that can be made available or tailored to Rebuild America partnerships? What types of financing programs are available? What types of technical assistance services are available?

6. PAST PERFORMANCE (10 Points) Has the State demonstrated a track record of accomplishments in activities related to the goals and objective of Rebuild America? Has the State met or exceeded expectations in past Rebuild America work under financial assistance agreements with DOE ?

7. COST SHARE (5 Points) - Cash or in kind contribution to the project above the minimum requirement of 50% of project cost.

F. Expenditure Limitations

Note: This is not an exhaustive list of what cannot be done under one of these grants; it is an attempt to point out major items that are not allowed.

Not allowed (examples): Purchase of land/buildings/vehicles/energy efficiency or renewable energy equipment; construction; capital improvements or equipment; or building retrofits.

G. Program Contacts

Headquarters:	Mark Bailey		(202) 586-9424
Regional Offices:	Atlanta	Greg Andrews	(404) 347-1046
	Boston	Greg Davoren	(617) 565-9706
	Chicago	Juli Pollitt	(312) 886-8571
	Denver	Dave Waltzman	(303) 275-4821
	Philadelphia	Susan Guard	(215) 656-6974
	Seattle	Paul Johnson	(206) 553-2154

6.33 BUILDING TECHNOLOGIES: BUILDING AMERICA

Estimated Funds Available:	$300,000
Estimated Number of Projects:	Up to six
Funding Ceiling:	The Federal share of the cost for any individual project will not exceed $100,000.
Cost Share:	Cost share of 50% and up from non-DOE funds (State governments, regional organizations, industries, industry organizations, and other) is encouraged. For example, where a 50% cost share is proposed, and the total cost of the project is $100,000, the DOE share would not exceed $50,000, and the grantee's cost share would be at least $50,000. Extra consideration will be given for higher levels of cost sharing and for use of non-Federal funds. See page 3 for more information about the use of other Federal funds for cost sharing.

BACKGROUND

Building America is an industry-driven, cost-shared program sponsored by the United States (U.S.) Department of Energy (DOE). Field support is provided by the National Renewable Energy Laboratory

(NREL). The objective of the Building America Program is to apply systems engineering approaches to the development of advanced residential buildings, including production techniques, products, and technologies that result in higher quality, energy-efficient housing. The primary market sector for this effort is new residential buildings that are single-family detached houses and attached town homes.

The goals of the Building America Program are to:

-accelerate implementation of advanced building energy systems in new residential construction through development and application of systems engineering approaches with cross-cutting industry teams;
-develop innovative technologies and strategies that enable the U.S. housing industry to deliver environmentally sensitive, quality housing on a community-scale while maintaining profitability and competitiveness of homebuilders and product suppliers; and
-deliver 50% reduction in energy consumption (on average, depending on climate), 50% reduction in construction site waste, 25% increase in use of recycled materials, increased labor productivity, and reduced construction cycle time.

The U.S. Department of Energy's (DOE's) Building America Program advocates a systems engineering approach to home building that unites segments of the building industry that traditionally work independently of one another. It forms teams of architects, engineers, builders, equipment manufacturers, material suppliers, community planners, mortgage lenders, and contractor trades. Currently, there are four teams comprised of more than 50 different companies:

Building Science Consortium works in 12 States to design cost-effective, energy-efficient single-family homes for each of the four U.S. climate types. Building Science builder partners have adopted Building America concepts to construct approximately 2500 homes in 17 communities, more than 250 of which have been completed. Re-engineering and design is underway in 8 other locations. Results from homes tested for a year at Prairie Crossing in Grayslake, Illinois, confirm that their techniques allow for 50% to 60% energy savings over the regional standard construction practice at a small incremental cost over the builder's standard practice.

Consortium for Advanced Residential Buildings (CARB) begins each project by creating a completely new design for each prototype house based on the builder's existing plan. This initial stage formulates architectural solutions that lend themselves to efficient mechanical and structural systems. Using this integrated approach, the CARB team has completed four prototypes that used significantly fewer resources to build while achieving energy savings of 20% to 35% over their accompanying control houses. If built on a production scale, which is planned for at least one prototype, construction cost savings can be achieved.

Hickory Consortium (Hickory) works with multifamily housing including factory-built modular housing. In 1998, it completed work on the Cambridge Cohousing Development in Cambridge, Massachusetts. This 41-unit planned neighborhood demonstrates energy savings of 50% over the Massachusetts Energy Code (prior to adoption of the 1995 Model Energy Code). Hickory has also completed engineering and specifications for a 61-unit high-rise apartment complex in Boston and two prototype

duplex homes. Plans are underway to integrate energy design features in an additional 60-unit multifamily complex in Boston.

Integrated Building and Construction Solutions (IBACOS) has conducted successful design and construction partnerships in 10 States to deliver energy-efficient, high quality, and affordable single-family homes since joining DOE's Building America Program in 1991. IBACOS partners with innovative builders and developers with a commitment to continually challenge and evolve current building practices to deliver better homes and communities. To date, partnerships with 18 builders and developers have resulted in the construction of 268 homes built to the higher standards of Building America. In addition, six pilot homes were built and tested to expand field and technical understanding of advanced building system technologies into the mainstream marketplace. Past performance achievements include 30% to 60% utility savings to the homeowner annually with no additional cost to the builder.

Research, development, and field support are provided by the National Renewable Energy Laboratory.

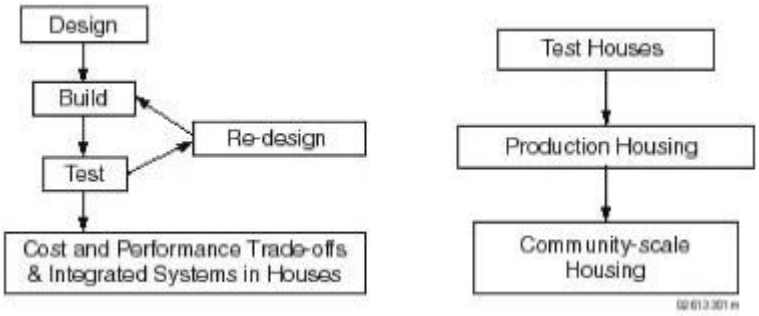
The program achieves its goals through an iterative systems engineering process to identify and implement successful cost/performance trade offs based on use of innovative systems that improve building performance without increasing cost. Program results and potential barriers are reported on a regular basis through team meetings, site visits, discussions of test results, and semi-annual presentations to NREL and DOE. The program's early successes are attracting the interest of industry leaders who would like to apply the Building America approach to developments of hundreds of additional houses. To take advantage of this interest, the Building America industry teams are encouraged to continuously evolve and increase their membership from the residential building industry so that the number of new buildings influenced by the program continues to grow.

The final products of each project include performance measurements and cost/performance evaluations in prototype houses, preproduction homes, and community-scale developments and handbooks providing guidelines for use of successful system strategies that can be applied on a production basis by the homebuilders involved in the program. Successful system strategies include innovative use of envelope materials, mechanical and lighting systems, and design and construction strategies.

America's new homes can be cost-effective to build as well as energy-efficient to live in. In fact, the energy consumption of new houses can be reduced by as much as 50% with little or no impact on the cost of construction through a systems engineering approach. Building America's systems engineering approach unites segments of the building industry that have traditionally worked independently of one another. It forms teams of architects, engineers, builders, equipment manufacturers, material suppliers, community planners, mortgage lenders, and contractor trades.

Building America teams work to produce houses that incorporate energy- and material-saving strategies from the very start of the building process — the design. Initial cost-effective strategies are analyzed and selected during the pre-design phase. The team then evaluates its design, business, and

construction practices to identify cost savings. Cost savings can then be reinvested to improve energy performance and product quality. For example, the design might incorporate new techniques for tightening the building envelope that enable builders to install smaller, less expensive heating and cooling systems. These savings can then be reinvested in high-performance windows that further reduce energy use and costs.



After the design has been evaluated, the team builds a prototype or "test" house. When completed, the prototype's systems are tested for efficiency and the team makes any necessary changes to the design to increase efficiency and cost effectiveness. The design is then re-tested before it is used to build additional houses. The design must be tested and retested for ultimate performance before it is ready for use in production or community-scale housing.

Throughout the design and construction process, the systems engineering approach considers the interaction between the building site, envelope, and mechanical systems, as well as other factors. It recognizes that features of one component in the house can greatly affect others and it enables the teams to incorporate energy-saving strategies at no extra cost. System trade-offs, like the tightened shell that enables an engineer to recommend a smaller HVAC system, can improve the quality and performance of a home without affecting its costs — to the builders or to the consumers.

Advantages to Builder

- Reduces construction costs
- Improves productivity
- Improves building performance
- Reduces callback and warranty problems
- Allows innovative financing due to predictable lower utility bills
- Gives builder a competitive advantage

Advantages to Consumer

- Increases quality without increasing cost
- Increases comfort and performance
- Does not detract from the home's aesthetic value
- Reduces utility bills
- Allows greater financing options

Examples of systems engineering cost-saving trade-offs include:

- Advanced framing systems
- Tightly sealed house envelopes

- Shorter, less costly ductwork
- Disentangling the infrastructure
- Smaller, less expensive mechanical systems
- Modular construction

Building America Program objectives are to be achieved by teaming arrangements. The industry teams include members from all the major types of companies involved in design, construction, and delivery of a typical U.S. residential building, including equipment manufacturers, material suppliers, developers, financial institutions, and builders. At a minimum, the team must have at least one industry member with demonstrated design capability, one industry member with construction capability, one industry member with building materials expertise, and one industry member with building equipment design and manufacturing capability. The team is encouraged to evolve and increase the breadth of industry team members during the program. Team members are required to directly contribute to the overall performance requirements of the team including completion of systems engineering studies, evaluations of housing systems and components, modification of building designs and material/equipment performance, evaluations of business practices, and price participation.

Projects Requested in FY 2000

The goal of Building America SEP Special Projects established in FY 2000 is to establish linkages between t States, the Building America teams and regionally-based innovative housing technology programs, define potential synergies with Building America projects and communities, and integrate successful strategies for improving the resource efficiency of new production housing into regionally-based fact sheets, case studies, and builder handbooks.

Building America's four industry teams work on a national basis with production builders to accelerate the adoption of advanced systems and construction techniques. Strong State and regional support is essential for the continued success of these projects. Under the Special Projects grants, working with DOE, NREL and the Building America Teams, the State program representatives for Building America will be responsible for distribution of Building America program information, development of State case study materials, developm of regional Building America workshops, and identification of State projects that may provide opportunities t serve as a test bed for industry team projects.

In order to successfully develop and expand the regional impacts of Building America projects, proposals should include, but are not limited to, one or more of the following deliverables and activities:

1) Establish a State Building America program representative;

2) Develop an action plan that outlines how Building America strategies can be expanded on a State bas

3) Support development of State projects that can act as showcases for the Building America Program;

4) Develop plans for State workshops that would promote the formation of alliances to support Building America projects and deliver technical assistance to potential project participants;

5) Develop plans for State training programs to expand use of successful systems that improve the resource efficiency of new production housing; and

6) Develop plans for State information and deployment activities that facilitate implementation of Build America successes on a regional basis.

Evaluation Criteria

1. Past history of successful involvement with cost-shared industry partnership projects;
2. Understanding of building industry needs and clear statement of project goals and objectives;
3. Viability of approach for achieving State and regional objectives;
4. Demonstrated match of proposal focus with activities of one or more Building America industry team;
5. Capabilities of proposal team including educational, State, industry, and subcontractor personnel required to complete the work successfully;
6. Extent of building industry involvement in the proposal;
7. Clearly stated deliverables and measures of success tied to goals of solicitation;
8. Level of cost sharing included in the proposal;

Expenditure Limitations: Funding under this project may not be used to cover the costs of building materials, construction or labor used in construction.

Program Contacts

Headquarters:	George James	(202) 586-9472	
Regional Offices:	Atlanta:	Angela Young	(404) 347-7143
	Boston:	Sapaleto Seymour	(617) 565-9704
	Chicago:	Mark Burger	(312) 886-8583
	Denver:	Jamey Evans	(303) 275-4813
	Philadelphia:	Susan Guard	(215) 656-6965
	Seattle:	Richard Putnam	(206) 553-2165

6.4 FEDERAL ENERGY MANAGEMENT PROGRAM (FEMP)

Estimated Funds Available: Up to $950,000

Estimated Number of Projects: The number of awards depends on the scope, quality, and competitiveness of the received proposals. Awards since FY 96 have ranged from $25,000 to $275,000 each.

Cost Share: Provision of funding from non-DOE sources is desired and will improv a proposal's competitiveness.

See page 3 for more information about the use of other Federal funds for cost sharing.

1. What is the Federal Energy Management Program (FEMP)?

Mission

The President and Congress have given the DOE Federal Energy Management Program (FEMP) the mission to reduce the use and cost of energy in the Federal sector by advancing energy efficiency, water conservation, and the use of solar and other renewable energy sources. FEMP accomplishes its mission by leveraging both Federal and private resources to provide technical and financial assistance to other Federal agencies, which take actions and make investments that increase energy efficiency and renewable energy utilization, and redu water consumption in their buildings, facilities and operations.

The Federal Sector

The Federal Government is the nation's largest single energy consumer. In Fiscal Year (FY) 1996 for examp the government spent nearly $8 billion for its 500,000 buildings, its vehicles, and process energy. Federal buildings are widely distributed geographically and functionally diverse. Energy is used for a wide variety of purposes by more than 100 agencies and government-related organizations. Each agency has a unique set of technical and financial assistance needs that reflect the characteristics of its building stock, operations, and management structure, adding to the complex nature of achieving Federal energy management goals and objectives.

Renewed Guidance

The President issued Executive Order 13123, "Greening the Government Through Efficient Energy Management," on June 3, 1999, providing new emphasis and commitment to improve the efficiency of Feder energy use. The Executive Order confirms current goals, and establishes new goals as follows:

- improve efficiency in Federal buildings by 35 percent by 2010 from the 1985 baseline
- reduce greenhouse gas emissions attributable to Federal buildings energy use by 30 percent from 1990

levels by 2010.

The Executive Order also provides direction for Federal procurement of energy in emerging competitive markets, and reaffirms commitment to increased use of renewable energy technologies. New provisions strengthen Administration oversight of, and agency accountability for, achieving energy management goals.

Strategy

FEMP's two primary strategies to accomplish its mission are as follows:

- Create and sustain a core level of Federal energy management as an institutionalized activity in all Federa agencies
- Help agencies obtain private, local government, and utility resources and funds for programs and projects

For additional information on FEMP's mission, strategies, and business practices, please see http://www.eren.doe.gov/femp/aboutfemp/business_plan/fempbusinessplan.html

Tactical Programs

FEMP categorizes its tactics into these general program areas: 1) project financing, 2) technical assistance an guidance, and 3) program planning and evaluation.

1) Project Financing

Project financing is a major thrust of FEMP's evolving program that has developed the Super Energy Savings Performance Contract (ESPC) and continues FEMP's facilitation of financing of Federal projects by utility companies.

a. Super ESPCs

Super ESPCs are broad scope, indefinite delivery, indefinite quantity (IDIQ) contracts that allow agencies to negotiate site-specific delivery orders with an energy service company (ESCO) without having to start the contracting process from scratch. An agency can use Super ESPCs to purchase equipment, products, and services that increase energy efficiency and solve environmental problems. Acquiring private-sector funding primary feature of the Super ESPC. The ESCO is repaid out of the resulting energy cost savings.

A Regional Super ESPC blankets a large geographic territory and reduces lead times to contract with an ESCO for its services. In this way, agencies can effectively “piggy-back” their own ESPC projects onto the broader Super ESPC, saving time and money.

Another form of FEMP's Super ESPC is the Technology-Specific Super ESPCs that blanket the entire Nation so that any Federal agency can contract with the preselected ESCOs for services for any facility in the country Rather than applying to a specific geographic region, a particular energy-efficient or renewable energy technology is emphasized in these contracts. To date, three Technology-Specific Super ESPCs have been

awarded, for:

- Solar thermal concentrating systems;
- photovoltaics; and
- geothermal heat pumps.

For additional information, please see http://www.eren.doe.gov/femp/financing/espc.html

b. Utility Incentives

FEMP facilitates partnerships between utilities that have incentive programs for Federal agencies. The incen programs vary greatly, but generally take the form of the utility providing one or more of the following tasks:

- performing initial energy audits
- providing specialized technical assistance
- acting as a contractor to manage design and construction projects; and/or
- providing funding or access to private funding for energy-efficiency and renewable energy projects.

For additional information, please see http://www.eren.doe.gov/femp/financing/utilincentives.html

2) Technical Assistance and Guidance (TA) Programs

At the core of FEMP's activities is the Technical Assistance and Guidance (TA) program that is to ensure tha Federal personnel have the highest level of technical competence and support in all areas of energy and wate management. The TA program provides informational materials and tools, training, and consulting resource including the following:

a. Technical Information and Tools

- Analytical Software Tools: Software to screen for energy-saving and renewable energy potential, perform life-cycle cost analyses, and assist with alternative financing plans;
- Greening Federal Facilities Resource Guide: A resource guide to help Federal facility managers reduce energy consumption and costs, improve working environments, and reduce the adverse environmental impacts of their operations; and
- Lighting Resources: Information on resources, specifications, training, and a videotape.

For additional information, please see http://www.eren.doe.gov/femp/resources.html

b. Training

- Orientation and Overview: The Energy Management Telecourse provides an interactive distance-learning experience and addresses the six "Trained Energy Manager" proficiency requirements specified in EPAct
- Energy-Efficient Products: FEMP Product Energy Efficiency Recommendations provide guidelines for selecting products that exceed the energy efficiency requirements of EPAct and Executive Order 12902.

- Cost-Savings Optimization Training: The Life-Cycle Costing course provides guidance in using the Build Life-Cycle Cost software to analyze Federal energy and water improvements for life-cycle cost-effectiveness.
- O&M Opportunities Training: The Operations and Maintenance (O&M) Management course teaches facility managers how to better control day-to-day facility operations, implement specific high-payback procedures, and integrate energy conservation measures.
- Integrated Design Training: The Designing Low-Energy Buildings course helps facility managers plan ho effectively integrate passive solar design, energy conservation, and renewable energy options.
- Energy Simulation Tool Training: This training is conducted through Facility Energy Decision Screening (FEDS 3.1) workshops. It provides tools that allow energy managers to choose and analyze energy and water conservation options at their sites.
- Specific Technology Training: Courses available in this training include MotorMaster, the FEMP Lights, Implementing Renewable Energy Project Workshop, and Water Resource Management.
- Project Financing Training: The training includes the FEMP Super ESPC course, which focuses on obtaining private-sector funding to implement energy efficiency improvements.

For additional information, please see http://www.eren.doe.gov/femp/resources/training/femptraining.html

c. Procurement Guidance

Through the Federal Procurement Challenge Program, FEMP helps Federal agencies identify energy-efficien products that meet their operational needs and are cost effective. FEMP issues a series of Product Energy Efficiency Recommendations, as called for in EPAct, that identify "recommended" efficiency levels for energ using products — i.e., levels that meet the criteria of the Executive Order and the Federal Acquisition Regulations (FAR). As Federal supply agencies, the General Services Administration (GSA) and Defense Logistics Agency (DLA) work with FEMP to clearly identify products they supply that meet the recommende efficiency levels. In their catalogs and on-line systems, GSA and DLA use the symbol or the ENERGY STA label to identify those products that meet or exceed the energy efficiency criteria for government purchasing.

For additional information, please see http://www.eren.doe.gov/femp/procurement/challenge.html

d. Targeted Projects

Targeted Projects serve as practical examples and showcases of new technologies and practices in the real world. FEMP disseminates the lessons-learned broadly by publishing case studies and maintaining formal showcase programs. The Targeted Projects program also works with the FEMP Services Network to provide reimbursable services for agencies that want to work with a mix of FEMP technical resources on projects. The three primary subjects are as follows:

- The SAVEnergy Program enables facility energy managers to identify and implement cost-effective projects, using the full spectrum of resources available through the agency, FEMP, utilities, and other sources. It gives energy managers a detailed description of how they can translate specific energy conservation measures into real projects, including budget requirements and potential financing options.

- The Design Assistance and Renewable Energy Program focuses on expanding renewable energy use in Federal facilities and providing guidance for cost-effective retrofit activities identified by an audit. This program also includes design assistance for "greening," energy efficiency, and water-saving projects.

- The Water Conservation Program helps plan and develop projects, leverage resources, and provide information on water efficiency technologies. As part of the project-screening process, FEMP has developed WATERGY, a spreadsheet model that uses water/energy relationship assumptions to estimate potential water and associated energy savings at a facility or building.

For additional information, please see http://www.eren.doe.gov/femp/techassist.html

3) Program Planning and Evaluation

FEMP maintains an active program to assess the effectiveness of its programs and those of the Federal sector A major goal is to institutionalize the concept and practice of energy efficiency so that Federal facility management practices become the standard way of doing business. Some of the objectives that may be of interest to States include the following:

- Conducting analytic work on important emerging issues
- Using pilot projects to test new ideas and new ways of implementing programs and sharing lessons-learne with agencies, State and local governments, and the private sector
- Expanding active agency participation in a wide range of programs
- Strengthening the effectiveness of our partnerships with industry, utilities, and States
- Evaluating existing programs to find the most effective and efficient, cost-savings projects and practices t transfer between sectors
- Refining our regional delivery of information and technical assistance services and creating new ways to reach Federal facility managers
- Continuing outreach approaches that can be easily tailored to individual agency needs

For additional information, please see
http://www.eren.doe.gov/femp/aboutfemp/business_plan/fempbusinessplan.html

2. What projects can States propose?

DOE requests proposals that will advance FEMP's mission, strategy, and tactical programs as noted above. Proposals should offer support in developing partnerships between Federal sites and the energy management industry including the private sector and the local-government sector. FEMP strongly recommends that State work closely with the appropriate DOE Regional Office (RO) to develop proposals that meet the regional needs as defined by the RO.

3. Are there any special funding requirements or limitations?

FEMP funds shall not be used for the purchase of land, buildings, vehicles, energy equipment; for constructio for capital improvements or equipment; or for building retrofits.

4. How will FEMP evaluate a proposal?

Proposals will be evaluated and ranked according to the following criteria. Proposals to develop alternative financing projects or for related training will be evaluated and ranked according to similar criteria. Additiona details on both sets of criteria is available for downloading at http://www.eren.doe.gov/femp/resources./html.

Pass/Fail Criteria

1. Proposal targets at least one Federal facility.
2. Proposal addresses expressed needs of the appropriate FEMP Representative at the Regional Office or Headquarters (see listing below).
3. Proposal includes publication of grant scope, funding, and monthly progress and issues reports via a State web site.

Proposals that pass the above pass/fail criteria will then be evaluated and prioritized based on the following graded criteria as appropriate to the proposal's scope:

Graded Criteria

1. How well and clearly will the proposed work support FEMP's mission? Total Points = 30

- Proposed work will make realistic and significant reductions in 1) energy or water consumption, 2) increases in the use of renewable energy technologies or power, or 3) improvements in the management c utility costs or energy-related operations & maintenance (O&M).
- Proposed work will develop strategic assessments of Federal needs and/or implement strategic solutions c approaches to the needs.
- Proposed work implements innovative solutions or approaches to Federal needs.

2. What are the demonstrated capabilities of the lead staff assigned to the proposed work? Total Points = 30

- Key staff have developed or managed programs/projects clearly comparable to the proposed work and significant in terms of dollar-volume.
- Key staff are involved in government/professional associations related to the proposed work.
- Key staff are experienced with the target Federal agency, site, or facility.
- The managing state office has a successful track record with previously funded SEP Special Projects.

3. What are the demonstrated capabilities or contributions of the project team partners for the proposed work? Total Points = 10

- The state demonstrates commitment by funding a significant level of staff hours or program/project funds
- Other partners provide significant resources in terms of staff capabilities, staff time, or funding.

- Partners have significant experience with the target Federal agency, site, or facility.
- Proposal includes the Federal facility manager's written commitment to the facility's role in the proposed work.
- Proposal includes the FEMP Representative's support of proposal.

4. How significant and feasible are the benefits of the proposed work? Total Points = 30

- Proposed work will achieve large energy or water savings for the target facilities in terms of total savings and percent reduction.
- Proposal demonstrates significant knowledge of the target facilities or market by quantifying and characterizing the facilities or market.
- Proposal quantifies and characterizes the target facilities' energy use and cost by building, site, region, or other appropriate level of detail.
- Proposed savings is based on baselining, screening, other assessments previously completed or to be completed by the proposal.
- As applicable, proposed work will achieve one or more of the following: 1) increase the use of renewable 2) improve utility or O&M management, or 3) reduce greenhouse gases by fuel-switching or energy reductions.

1. What should be included in a proposal?

- Provide a narrative evaluation of how the proposed work meets the evaluation criteria. Organize your narrative to match the outline of the criteria.
- Include two executive summaries for publication in DOE and energy-industry reports and articles as follows: 1) a summary of 25 words or less and 2) a summary of one paragraph.
- Clearly state which FEMP programs the proposal intends to support.
- Describe how you worked with the appropriate FEMP Representative to develop the proposal.
- In addition to the hard-copy submittal required by OBTA, also email your proposal as a single Word, WordPerfect, or Adobe Acrobat pdf file to tanya.sadler@ee.doe.gov. Do not include the boiler-plate or standard documents required only to meet Federal/DOE grant regulations. If practical for file size, includ supporting materials required or requested by this FEMP portion of the RFP such as letters of support or commitment from proposal partners.

2. Program Contacts

Headquarters: Tanya Sadler 202-586-7755

FEMP Representatives at the Regional Offices: http://www.eren.doe.gov/femp/aboutfemp/fempcontacts.htm

Atlanta:	Dave Waldrop	(404) 347-3483	david.waldrop@hq.doe.gov

Boston:	Paul King	(617) 565-9712	paul.king@hq.doe.gov
Chicago:	Sharon Gill	(312) 886-8573	sharon.gill@hq.doe.gov
Denver:	Randy Jones	(303) 275-4814	randy_jones@nrel.gov
Philadelphia (in NY):	Bill Klebous	(212) 264-0691	william.klebous@hq.doe.gov
Seattle:	Curtis Framel	(206) 553-7841	curtis.framel@hq.doe.gov
Seattle:	Arun Jhaveri	(206) 553-2152	arun.jhaveri@hq.doe.gov
Seattle:	Cheri Sayer	(206) 553-7838	cheri.sayer@hq.doe.gov

6.5 POWER TECHNOLOGIES

6.51 POWER TECHNOLOGIES: HYDROGEN REFORMER FIELD VERIFICATION

Estimated Funds Available: $500,000

Estimated Number of Projects: 1-2

Cost Share: At least a 50% non-Federal cost share is required. For example, where the total cost of the project is $100,000, the Federal share would not exceed $50,000, and the grantee's cost share would be at least $50,000.

Background:

In response to meeting new State emission regulations, several automobile companies have been proceeding with the design, development and demonstration of hydrogen fuel-cell vehicles where the hydrogen is produc off the vehicle and is then stored as high pressure gaseous hydrogen on the vehicle. A key development for t low cost production of hydrogen for vehicle applications is the distributed production of hydrogen from smal reformers. The Department of Energy has been funding advanced natural-gas reformer development as part a research and development program with industry to produce hydrogen from small reformers. In addition, t industry has been developing such technology in meeting demands for distributed hydrogen generation syste In light of that experience and the growing need for distributed hydrogen generation systems to fuel hydroge fuel-cell vehicles, the Department seeks to engage in collaborative efforts with the States and the territories i the siting and operation of such reformer systems to better understand the performance, maintenance, operati and economic viability of these systems.

Projects Requested in 2000

Grants are available for the purchase and installation of small advanced reformer systems, using US-manufactured natural-gas to hydrogen reformers that can produce 50,000 to 150,000 SCFD hydrogen. It should include a fast-fill fuel dispensing system with fueling capability at pressures suitable to deliver hydrog up to 5000 psi for vehicle applications. The system should include a gas-compression system with suitable storage capability. At the sites where they are installed, the projects would seek to verify the ability of the vehicle operator to fill the vehicle with hydrogen, determine maintenance costs and evaluate the operational performance of the system.

Evaluation Criteria

State proposals will be ranked according to the following criteria:

- Value in verifying a viable application that can be replicated at other sites, including the number and size potential applications (30 points).

- Technical quality of plans for system design, operation and maintenance (35 points).

- Cost sharing above 50% (15 points).

- State and local transit authorities involvement in planning and implementing the projects for disseminatir results and lessons learned within the State and nationally (20 points).

Program Contacts

Headquarters:	Sigmund Gronich		(202) 586-1623
Regional Offices:	Atlanta	Warren Zurn	(404) 347-1047
	Boston	Michael Scarpino	(617) 565-9716
	Chicago	Mark Burger	(312) 886-8583
	Denver	Gibson Asuquo	(303) 275-4841
	Philadelphia	Maryanne Daniel	(215) 656-6964
	Seattle	Roxanne Dempsey	(206) 553-2155

6.52 POWER TECHNOLOGIES: WIND ENERGY CASE STUDIES

Estimated Funds Available:	$500,000
Estimated Number of Projects:	3-4
Geographical Limitation:	Limited to States in the Chicago, Denver, and Seattle Regions
Cost Share:	At least a 50% non-Federal cost share is required. For example, where the total cost of the project is $100,000, the Federal share would not exceed $50,000, and the grantee's cost share would be at least $50,000.
Funding Ceiling:	The Federal share of the cost of a project shall not exceed $150,000.

Background:

Wind development has been ongoing in California since the early 1980s largely as the result of then-favorabl Federal and State tax provisions, access to the market under Section 210 of PURPA, and good wind resources. Development occurred initially in the Altamont Pass east of Livermore, then in San Gorgonio nea Palm Springs and then in the Tehachapi Mountains, near Barstow. Currently, wind development is beginnin occur in the upper Midwest where almost 400 MW were installed by June 30, 1999, in Texas where 120 MW in two projects will be installed in the next 12 months, in the Pacific Northwest and in Wyoming and Colorac In many cases, these projects have occurred because of local circumstances or customers' willingness to buy green energy. World-wide over 10,000 MW are installed, of which the United States has 2500 MW, most of which is installed in California. By way of comparison, the European Commission has adopted a goal of 30,000 MW of wind energy by 2010.

A major problem that hinders wind development is that State and local governments are unfamiliar with wind energy, have little experience with wind development and have not considered the benefits in providing local jobs for installation and operations, and perhaps, manufacturing.

Projects Requested in 2000

Grants are available for case studies of the benefits and costs of deployment of 25 MW or larger wind project in States in the Midwest, Great Plains and Far West (i.e., States in the Chicago, Denver and Seattle Regions). The projects should identify good wind resource locations, develop site parameters related to projects of 25 t 50 MW or more in size using state of the art wind turbines, examine the tax and cost flows associated with a nominal construction period, expected operations and maintenance costs, salaries and multipliers, the expecte revenues from sale of the electric power generated and tax benefits to State, local and Federal entities. Nominal royalties to landowners should be assumed. Studies of existing or potential projects would be

acceptable.

The maximum Federal share of project costs will be no more than 50 percent.

Evaluation Criteria

State proposals will be ranked according to the following criteria:

- Technical quality of the statement of work for the project
- Experience of the project team, including knowledge of wind project development.
- Cost sharing above 50 percent
- State involvement in the project, including prospective permitting and other decision making agents.

Program Contacts:

Headquarters:	Jack Cadogan		(202) 586-1991
Regional Offices:	Chicago	Mark Burger	(312) 886-8583
	Denver	Steve Palomo	(303) 275-4838
	Seattle	Jeffrey James	(206) 553-2079

6.53 POWER TECHNOLOGIES: BIOMASS POWER PROJECTS

Estimated Funds Available: $250,000

Estimated Number of Projects: 6 to 8 ($30,000 - $40,000 in Federal funds per project)

Cost Share: At least a 50% non-Federal cost share is required, and a higher percentage is encouraged. For example, where the total cost of the project is $100,000, the Federal share would not exceed $50,000, and the grantee's cost share would be at least $50,000.

Background:

The Biomass Power Program under the Office of Power Technologies is seeking State and local partners to identify low-cost project opportunities for the introduction and utilization of biomass power technologies for recovering energy from animal wastes while preventing pollution. Growth and concentration of the livestock industry creates opportunities for the proper disposal of the large quantities of manures generated at dairy, swine and poultry farms. Pollutants from unmanaged livestock wastes degrade the environment, and methane emitted from decomposing manure may contribute to climate change. Manure management systems can provide pollution prevention an also convert a manure management problem into a new profit center.

Projects Requested in FY 2000:

Animal Waste Modular Systems - Small energy and power generating systems that use animal wastes as the primary feedstock will find a growing market in remote and rural farm areas worldwide. Small units will usually have a 5 - 200 kW rating. Larger units will have a smaller market share. Systems like this are referred to as modular biomass power systems. Such units should be factory made and capable of being mass produced, delivered to the user in completed form, and installed with no or little site-erection or assembly.

Grant applications are sought to develop such modular systems based on combustion, gasification, anaerobic digestion, or pyrolysis. The units shall be designed to handle animal wastes like manures, litters, a paunch manure. Fuel flexibility is desired, and the ability to coprocess agricultural wastes and peat with the animal wastes would be considered a plus. Management of air, liquid and solid wastes from the process must have an environmentally responsible management plan. Processes that generate a fuel gas shall include an appropriate power generation step such as advanced fuel cell, Stirling engine, diesel generator, or micro-turbine. Gas cleanup must be provided as required by the conversion unit. A feasibility study must include a preliminary market study, resource assessment, tests to quantify material and energy balance, integrated system design, preliminary installed and connected cost and price estimates, emissions and residues management plan, and comparative benefits.

Evaluation Criteria:

1. Diversity of Partnerships: at a minimum - power equipment manufacturers/power generators, feedstock producers (farmers/landowners), and State governments must be project participants (35 points).

2. Economic and Environmental Benefits: projects should address the local impacts resulting from integrated biopower deployments (25 points).

3. Opportunity for Replication: projects that can be readily replicated/duplicated either within the State or in other parts of the country are of particular interest (25 points).

4. Cost-Share: amount of cost-share in excess of 50% (15 points).

Program Contacts

Headquarters:	Sam Tagore		(202) 586-9210
Regional Offices:	Atlanta	Warren Zurn	(404) 347-1047
	Boston	David Mark	(617) 565-9711
	Chicago	Bill Hui	(312) 886-8586
	Denver	Dave Watzman	(303) 275-4821
	Philadelphia	Maryanne Daniel	(215) 656-6964
	Seattle	Jeffrey James	(206) 553-2079

6.54 POWER TECHNOLOGIES: THE ADVANCEMENT OF PHOTOVOLTAIC (PV) BALANCE OF SYSTEMS (BOS) COMPONENTS

Total Funds available:	$250,000
Estimated number of projects:	1 or more
Cost share:	At least 50% of project costs must be from non-Federal funds, with higher percentages of non-Federal funds encouraged. For example, where the total cost of the project is $100,000, the DOE share would not exceed $50,000, and the grantee's cost share would be at least $50,000.

Background

In the area of photovoltaics, the term BOS refers to all of the components of a photovoltaic system except the PV modules. Lowering the life-cycle-cost and increasing the reliability of BOS components are essential to the future widespread implementation of photovoltaics.

Projects Requested in 2000

Projects for which grants are available for FY 2000 should be designed to:

. Lower the life-cycle-cost of PV BOS components. (Approaches to lowering life-cycle-cost might include improved manufacturing processes, more rugged components, and more efficient utilization); and

. Improve the reliability of PV BOS components. (Approaches to improving reliability might include quality control, screening of components, surge protection, temperature control, and superior control algorithms).

Proposers need not limit their proposals to the approaches mentioned above, but the proposals should address the issues of life-cycle-cost and reliability. Proposals should avoid duplicating existing capability and should avoid research that does not result in a marketable product.

Evaluation Criteria

State proposals will be ranked according to the following criteria:

1) Experience of the proposer. The proposer must establish experience in the area of the manufacture of electronic components. At least 5 years experience is sought. (20 Points).

2) Understanding of the problem. The proposer must show that he understands the problem, elating his proposal to the objective of lowering life-cycle-cost and improved reliability. (40 points)

3) Adequacy of facilities and personnel. The proposer must show that he has available the facilities and personnel necessary to complete the work. (20 points)

4) Plan for implementation. The proposer must present a plan to implement their result into a finished product or service that meets the contract goals. (20 points)

Program Contacts

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